UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,254	01/31/2002	Shinichiro Watase	219014US2	6561

22850	7590	12/22/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
WANG, THOMAS D

ART UNIT	PAPER NUMBER
2122	

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspond nce address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2002*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 January 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the application filed January 31, 2002.

2.   Claims 1-11 have been examined.

Priority

3.   The priority date considered for this application is January 31, 2001.

Drawings

4.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Fig. 4 editor 50. The drawings are also objected to because they do not include the following reference sign(s) mentioned in the description: Page 12 line 12, "an input unit 54" which apparently should have read "unit 84" according to the drawing in Fig. 7; also line 16 in the same page wherein "the memory" needs to have a referencing element mention, i.e. element 82. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Sp cification

5.   Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6.   The disclosure is objected to because of the following informalities: on page 12 line 12, "an input unit 54" apparently should have read "an input unit 84" in Fig. 7.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4-5 and 7-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of "outside" is vague in its meaning. It is not clearly understood whether the term "outside" in this context to be interpreted as to an interface or as to a system. For compact prosecution, examiner treats "an outside" as – a user.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

8.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9.   Claims 5-7 and 11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

10.   Claim 5 merely recites a software building support method of building a software program by connecting a plurality of software components. So as claim 11 merely recites a computer readable recording medium having stored a composite component comprising a combination of a plurality of software components. These components are merely software program per se. Such claimed matter, which is descriptive material per se, non-functional descriptive material is not statutory because it is not a physical "thing" nor a statutory process as there are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed aspects of the invention which permit the computer's program's functionality to be realized. Since a computer program is merely a set of instructions capable of being executed by a computer, the program itself is not a process, without the computer-readable medium needed to realize the computer's functionality. In contrast, a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer program and the medium which permit the computer program's functionality to be realized, and is thus mandatory. *Warmerdam*, 33 F.d at 1361, 31 USPQ 2d at

1760. In *re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978). See MPEP

§ 2106 (IV)(B)(2)(a).

On this basis, claims 5 and 11 are rejected under 35 U.S.C. § 101.

Claims 6 and 7, which fail to further remedy the deficiency of the independent

claim 5, are also rejected under 35 U.S.C. § 101 on the same basis.

Claim Rejections - 35 USC § 102

11.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12.   Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by *Fowlow*

et al. (US 6,189,138, hereafter *Fowlow*).

13.   With respect to claim 1, *Fowlow* discloses a software building support system of

building a software program by connecting a plurality of software components (See Title

and Fig. 4), said system comprising:

- an interface part that receives an instruction from a user (E.g. see Fig. 5 editor

    500; col. 4:23-33 and 10:21-53, the application construction environment

    includes a graphical user interface for displaying, selecting, and linking parts; col.

    15:65-16:7, the step of selecting includes making a selection action on one of the

    icons;) ; and

- a composite component setting part that sets a plurality of software components
  (software objects), which are associated (connected) with each other, as a single
  composite component, on the basis of the instruction obtained by said interface
  part (E.g. see Fig. 4 Composition Builder 402, Component Service 404; col. 9:50-
  63, takes the composition created by the composition builder and produces
  program source files; col. 10:53-67, parts corresponding to various pre-existing
  code for the implementation of the application being composed. ... is connected
  to Input Stream part by a connection).

14.   With respect to claim 2, *Fowlow* further discloses the system wherein said
composite component setting part includes a terminal setting part for setting a terminal
of the composite component (parts of an object), which is used for allowing the
composite component to communicate (establish connections) with another external
component (E.g. see fig 5:536; col. 11:1-15, objects communicate amongst themselves,
col. 11:37-46, to generate corresponding code for establishing the necessary
connections among the parts).

15.   With respect to claim 3, *Fowlow* further discloses the system wherein said
composite component setting part includes an attribute setting part for setting an
inherent property of the composite component. (E.g. see col. 4:26-34, a region for
setting attribute values of selected parts)

16.   With respect to claim 4, *Fowlow* further discloses the system wherein said
interface part is adapted to display a plurality of software components as icons on a tool
screen (composition builder) and to receive an operation for the icons as an instruction

from the user (E.g. see col. 3:48-52, objects comprise icons and the step of selecting

includes making a selection action on one of the icons; col. 4:18-21, the composition

builder comprises a composition workspace in which parts can be selected and linked;

col. 15:65-16:7, said selecting comprises making a selection action on one of said

icons).

17.   With respect to claim 5, *Fowlow* discloses a software building support method of

building a software program by connecting a plurality of software components, said

method comprising the steps of:

- preparing a plurality of software components, which are associated with each

    other, on the basis of an instruction received from a user (wherein the claim is

    directed to a different class of statutory subject matter than claim 1:2, yet recites

    the same limitation as a method. Since the reference teaches every limitation of

    claim 1:2, it therefore also reads on every limitation of the claim); and

- setting said plurality of software components as a single composite component

    on the basis of the instruction received from the user (this claim reads on the

    same limitation as claim 1:2).

18.   With respect to claim 6, *Fowlow* further discloses the method further comprising

the step of setting a terminal of the composite component, which is used for allowing the

composite component to communicate with another external component (this claim

reads on the same limitation as claim 2).

19.   With respect to claim 7, *Fowlow* also discloses the method further comprising the

step of setting an inherent property of the composite component on the basis of the

instruction received from the user (this claim reads on the same limitation as claims 3 and 4).

20.   With respect to claim 8, *Fowlow* discloses a computer readable recording medium having stored a software building support program of building a software program by connecting a plurality of software components, said program causing a computer to execute the procedures of:

- preparing a plurality of software components, which are associated with each other, on the basis of an instruction received from a user (this claim reads on the same limitation as claim 1:2); and

- setting said plurality of software components as a single composite component on the basis of the instruction received from the user (this claim reads on the same limitation as claim 1:2).

21.   With respect to claim 9, *Fowlow* also discloses the recording medium wherein said program further causes the computer to execute the procedure of setting a terminal of the composite component, which is used for allowing the composite component to communicate with another external component on the basis of the instruction received from the user (this claim reads on the same limitation as claim 2).

22.   With respect to claim 10, *Fowlow* also discloses the recording medium wherein said program further causes the computer to execute the procedure of setting an inherent property of the composite component on the basis of the instruction received from the user (this claim reads on the same limitation as claim 3).

23.   With respect to claim 11, *Fowlow* discloses a computer readable recording medium having stored a composite component comprising a combination of a plurality of software components which are associated with each other, said composite component comprising:

- a terminal portion for setting terminal for communicating with another external component (this claim reads on the same limitation as claim 2);

- a processing describing portion (a worksheet) for describing a flow of processing between a plurality of software components (software objects) (E.g. see Fig. 5 editor 525; col. 11:1-15, a service that an object is capable of requesting and processing. ..., objects communicate amongst themselves by passing and operating upon object references; col. 11:52-60, by examining the worksheet, a programmer can readily identify the relationship among the objects); and

- an attribute value storing portion for storing therein an attribute value indicative of an inherent property of the plurality software components (this claim reads on the same limitation as claim 3).
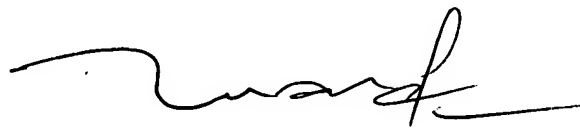
Conclusion

24.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Williams (US 5,850,548) also teaches components that can be encapsulated into a Composite Component, rendering additional functionality and can be reinserted into the library for reuse.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas D. Wang whose telephone number is (571) 272-7954. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TDW

TUAN DAM
SUPERVISORY PATENT EXAMINER